Confidential Business Information

EPA Region 10
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JULIE VERGERONT
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US EPA Region 10
Office of Compliance and Enforcement

Shell Oil Products US
8505 South Texas Road (Deliveries)
P.O. Box 622 Anacortes, WA 98221-0622
Tel: 1 360 293 0800
Fax: 1 360 293 0808

February 3, 2016

Javier Morales
U.S. EPA, Region 10
1200 Sixth Avenue, Suite 900, OCE-101
Seattle, Washington 98101

**Re: Request for Information Regarding the Facility located as 8505 South Texas Road, Anacortes, WA.**

Dear Mr. Morales,

This letter and the attached documents are being provided by Shell Oil Products Puget Sound Refinery (the "Company") in response to your Request for Information Regarding the Facility located at 8505 South Texas Road, Anacortes, WA received on December 6, 2015. The Company understands this request was to obtain further information subsequent to the U.S. Environmental Protection Agency ("EPA") Risk Management Program ("RMP") inspection that was conducted the week of August 10, 2015. Please find the Company's responses to your requests below and the attached relevant documentation with a Statement of Certification having been signed by a duly authorized officer.

Please note that certain information that Shell is providing constitutes confidential trade secrets and commercial or financial information ("Confidential Business Information" or "CBI") exempted from public disclosure under 5 U.S.C. § 552(b)(4) and subject to a claim of confidentiality under 40 C.F.R. § 2.208. Confidential business information gathered under the authority of Section 114 of the Clean Air Act is subject to 40 CFR § 2.301 and appropriate steps should be taken to properly safeguard the information. 40 C.F.R. § 2.211. We have marked specific documents as CBI where appropriate. Please treat these documents and the information they contain as confidential, as provided by the Freedom of Information Act or equivalent state law.

**Supplemental Request 1: Identify the legal owner of the facility. If the owner and operator of the facility is not the same entity, identify the operator of the facility and provide contracts/legal documents between entities as they relate to ownership, purchase or buy-back agreements and contract operation.**

**RESPONSE:**

The legal owner and operator of the facility is Shell Oil Products U.S.

**Supplemental Request 2: Provide the name of the facility, as used by the owner and operator, and the street and mailing addresses for the facility.**

**RESPONSE:**

The name of the facility is Puget Sound Refinery. The street address is 8505 South Texas Road, Anacortes, WA 98221 and the mailing address is PO Box 622 Anacortes, WA 98221.

**Supplemental Request 3: Explain how the maximum intended inventories of the flammable mixture were calculated for the East, South, and North Flare System. Provide supporting documentation, including the maximum intended inventory calculations.**

**RESPONSE:**

The Company previously provided information relating to this request in response to Request 38 on August 26, 2015, Bates-labeled PSR06212 and PSR06249, stating that no maximum intended inventories were calculated for the Flare Systems because the systems are not considered to be covered under EPA's Risk Management Program. Materials routinely in the East, South and North Flare systems include purge gas and steam. Any additional non-routine material would be the result of a unit upset. In the event of an upset, any inventory in the flare system would have been accounted for in other units. Information related to the flare system equipment and piping, including internal capacity and operation, is provided below in response to Supplemental Requests 4, 5 and 6.

**Supplemental Request 4: Describe the composition of chemical in the flammable mixture by weight percent in the East, South, and North Flare System. Provide supporting documentations.**

**RESPONSE:**

Materials routinely in the East, South, and North Flare System include purge gas and steam only. The purge gas is natural gas composed primarily of methane. In the East Flare, the purge gas is a natural gas (methane) supply from a 3rd party whereas the North and South Flare have some ethane and propane with methane from the refinery. The Company is providing the composition breakdown in Bates-labeled PSR06872 through PSR06942. An exception to the chemical composition would occur during a unit upset, which is not routine. During an upset the composition would depend on the type of upset and the unit involved, and is therefore not known. The chemical composition of the upset will be accounted for in the respective process unit.

**Supplemental Request 5: Describe and list the process equipment and piping circuits for the East, South, and North Flare System including the dimensions and volume of the process vessels and piping circuits. For each process vessel, indicate if it is oriented horizontally or vertically. Provide supporting documentation.**

**RESPONSE:**

In response to this request the process equipment and piping circuits for the East, South, and North Flare System are as shown in Supplemental Request 8 as found below. The Company is providing supporting isometric drawings of interconnecting piping as well as vessel dimension specification sheets for the flare systems in Bates-labeled PSR06722 through PSR06749. Additionally, volume calculations for flare system vessels are provided in Bates-labeled PSR06950 through PSR06955 and PSR06868.

**Supplemental Request 6: Describe the operating pressures and temperatures of the process equipment and piping circuits for the East, South, and North Flare System. Provide supporting documentation.**

**RESPONSE:**

In response to this request, the Company is providing documentation showing normal operating temperatures and pressures for East, South, and North Flare System based on flare instrumentation. This data is included in Supplemental Response 4.

**Supplemental Request 7: Provide accurate and up-to-date piping and instrumentation diagrams (P&IDs) for the East, South, and North Flare System as required by 40 C.F.R. § 68.65(d). If existing P&IDs do not represent a current configuration or rate, so state and provide current configurations and rates where appropriate.**

**RESPONSE:**

In response to this request, the Company is providing current piping and instrumentation diagrams (P&IDs) for the East, South, and North Flare System in Bates-labeled PSR06755 through PSR06760 and PSR06871.

**Supplemental Request 8: Provide an accurate and up-to-date plot diagram, site plan, or drawings showing the location of the East, South, and North Flare System including the location of the piping and process equipment of the flares connected or adjacent to the other refinery processes.**

**RESPONSE:**

In response to this request, the Company is providing a flare isometric drawing showing location of the East, South, and North Flare System in relation to other refinery processes in Bates-labeled PSR06870. The provided drawing identifies the individual process units and their relation to the individual flare systems.

**Supplemental Request 9: Explain the flare studies conducted for the East, South, and North Flare System including the worst-case relieving scenarios and the battery limits. Provide supporting documentation.**

**RESPONSE:**

The operation of the flare systems are assessed as part of the Company's Hazard and Effects Management Processes and its commitment to continuous improvement. As part of the Company's Flare Recommended Practice, the Company employs a UniSim model of flare loads from unit upsets to estimate, during a plant wide power failure scenario, maximum backpressure on Pressure Relief Valves and peak instantaneous liquid rates. The Company is providing the Flare Work Process Overview in the Flare Recommended Practice and recent results of the flare model in Bates-labeled PSR06943 through PSR06948 and PSR06956 through PSR06958. The flare model results at the Knockout drums illustrates that liquids are predicted to drop out in the North and South Flare Knockout drums for the largest predicted loads. The Company is currently in the process of revising its flare study with more detailed models. Information related to the battery limits is provided above in response to Supplemental Request 8.

**Supplemental Request 10: Explain how you determined that the East, South, and North Flare System was not a covered process subject to 40 C.F.R. Part 68. Provide supporting documentation.**

**RESPONSE:**

The company previously provided information relating to this request in response to Request 38 on August 26, 2015, Bates-labeled PSR06212 and PSR06249, stating that no maximum intended inventories were calculated for the Flare Systems because the systems are not considered to be covered under EPA's Risk Management Program. Any material other than purge gas and steam would be a result of a unit upset. In the event of an upset, any inventory in the flare system would depend on the circumstances of the upset and would have been accounted for in other units. Furthermore, the East, South and North Flare systems are independently operated from the adjacent process units.

If you have any questions regarding this information, please contact Shirley Yap, General Manager, Puget Sound Refinery at 1 (360) 293-0819.

Sincerely,

Shirley Yap
GM, Puget Sound Refinery

Enclosure 3

Puget Sound Refinery
Shell Oil Products U.S.
P.O. Box 62
Anacortes, WA 98221

**INFORMATION REQUEST**
**STATEMENT OF CERTIFICATION**

I certify that the enclosed responses to EPA's Information Request issued to Puget Sound Refinery, Shell Oil Products U.S. are true, accurate, and complete. I certify that the portions of these responses which I did not personally prepare were prepared by persons acting on behalf of Puget Sound Refinery, Shell Oil Products U.S. under my supervision and at my instruction, and that the information provided is true, accurate, and complete. I am aware that there are significant penalties for submitting false information in response to this Information Request, including the possibility of fine and imprisonment.

Signature

Shirley Yap
Printed Name

General Manager, Shell Puget Sound Refinery
Title

Feb 3rd, 2016.
Date